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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/557,695 | 12/22/2005 | Eric Chevalier | 2590-144 | 7840 |

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| EXAMINER | |
|---|---|
| ALEJANDRO MULERO, LUZ L | |
| ART UNIT | PAPER NUMBER |
| 1716 | |
| MAIL DATE | DELIVERY MODE |
| 02/22/2011 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| **Advisory Action Before the Filing of an Appeal Brief** | **Application No.** 10/557,695 | **Applicant(s)** CHEVALIER ET AL. | |
|---|---|---|---|
| | **Examiner** Luz L. Alejandro | **Art Unit** 1716 | |

***--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --***

THE REPLY FILED 07 February 2011 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☒ The period for reply expires *3* months from the mailing date of the final rejection.
   b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☒ Applicant's reply has overcome the following rejection(s): See Continuation Sheet.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: *1,2,5-8,12,14,20,21,25 and 32*.
   Claim(s) withdrawn from consideration: *4,9,15-19,22-24,26,27,30 and 31*.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/Luz L. Alejandro/
Primary Examiner, Art Unit 1716

Continuation of 5. Applicant's reply has overcome the following rejection(s): rejections of claim 32 under 35 USC 112-first and 35 USC-second paragraphs..

Continuation of 11. does NOT place the application in condition for allowance because:

Applicant's arguments, see the remarks section (pages 7-8) of the response filed 02/07/11, with respect to the rejections of claim 32 under 35 USC 112-first and 35 USC 112-second paragraphs have been fully considered and are persuasive. The rejections of claim 32 have been withdrawn. In the outset, it is noted that applicants arguments with respect to the rejection of claim 32 under 112-second paragraph (see, page 9 of the response filed on 02/07/11) included arguments related to two figures (Figure A and Figure B) which, as stated by applicant, were to be attached to the response of 02/07/11. However, such figures appear to have not been included/attached to the response. It should be noted that even though the figures are missing from the response, the arguments with respect to the 112-second paragraph rejection that are not related to the figures are persuasive and for those reasons the rejection of claim 32 under 35 USC 112-second paragraph has been withdrawn.

Respectfully stated, applicant is incorrect when stating that the examiner stated that applicant has only attacked the references individually. The examiner respectfully contends that it is clear from the argument in the first paragraph of page 9 of the last office action, that the examiner stated the piecemeal analysis of the references with respect to applicant's argument that Bennett fails to disclose an apparatus comprising magnetic field generators around the antenna since it was clear from the rejection of the claims that the Campbell reference was used to reject/show such limitation. Furthermore, it is respectfully contended that, as stated in the last office action and in the last argument below, applicant's arguments with respect to the Campbell, U.S. Patent 4,990,229, Kwon, US 2002/0189763, and Howald, U.S. Patent 6,441,555 references, are piecemeal analysis of the references since the primary reference of Bennett discloses the argued limitations.

Furthermore, applicant argues that Bennett fails to disclose an antenna comprising at least two conductive loop elements. However, the examiner respectfully disagrees because as defined by applicant's own specification a conductive loop is defined as "a conductive element which is closed or opened, and which the shape can be circular, elliptical, or at right angles" (see page 4-lines 30-32 of specification). By this definition, clearly the coil portions 13a can be considered to be conductive loop elements and therefore the claim limitations have been met. Furthermore, when giving the claim its broadest reasonable interpretation, each claimed "loop element" could be interpreted as an element or one part of the entire loop (for example, 13a). Additionally, note that Fig. 12 of Bennett clearly shows a closed top loop connected to a closed bottom loop and therefore the two conductive loop element features is also shown in this figure.

Applicant additionally argues that the leads 14a and 14b, and rings 12a and 12b are not part of the antenna. However, the examiner respectfully disagrees because when giving the claim its broadest reasonable interpretation the portions (such as 14a and 14b) that connect the coils to each other can clearly be considered to be part of the coil. Note that it is clear from, for example, fig. 12 that the antenna comprises portions 14a and 14b electrically interconnecting portions 13a of the antenna, closed top loop portions of the antenna, and the bottom loop portion of the antenna.

Regarding applicant's argument that Bennett does not teach generating a plasma by helicon waves, the recitation helicon waves has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See In re Hirao, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and Kropa v. Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).
Furthermore, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., generating a plasma by helicon waves) is not recited in the body of the claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Concerning applicant's arguments with respect to the Campbell, U.S. Patent 4,990,229, Kwon, US 2002/0189763, and Howald, U.S. Patent 6,441,555 references, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).